PREVALENCE AND CORRELATES OF ANAEMIA IN PATIENTS INFECTED WITH HIV ATTENDING THE KENYATTA NATIONAL HOSPITAL COMPREHENSIVE CARE CENTRE

DR RIRO MWITA MOSES CONCORD

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ABSTRACT

BACKGROUND: Anemia is the commonest hematological abnormality in HIV infection and has been shown to be a statistically significant predictor of disease progression to AIDS and independently associated with an Increased risk of death in HIV infected patients. It has also been shown to have an impact on functional outcomes and quality of life. With increased use of HAART, prevalence of anemia has declined but it still poses a challenge because some of drugs in the HAART armamentarium such as AZT have been associated with hemato-toxicity.

OBJECTIVE. To study the presence of anemia, its correlates and consequences in HIV infected patients attending the Kenyatta National Hospital comprehensive care centre.

STUDY DESIGN

A cross-sectional descriptive study.

STUDY SETTING

Comprehensive Care Centre at Kenyatta National Hospital.

METHODS

A total of 411 HIV Elisa positive patients stratified into HAART naïve- 199 (48.4%) patients and HAART experienced for at least six months- 212 (51.6%) patients were recruited and had their history, physical examination, total blood count; CD4 count, peripheral blood films and where indicated chest radiographs and sputum tests done. The patients were also subjected to the Functional Assessment of HIV Infection questionnaire-FAHI, a health related quality of life instrument, validated and HIV specific.

RESULTS

The overall prevalence of anemia was 33% out of which 52% manifested Grade 1 anemia (Hb 9.5g/dl-11.9 g/dl) as per the Aids Clinical Trial Group severity score. The prevalence of anemia in the HAART naïve group was 49.1%

whereas in the HAART experienced group it was 17.5%.34.4% of the HAART experienced patients were on AZT based regimen and 65.6% were on non AZT based regimen. The prevalence of anemia in the AZT based regimen was 4.7% and 12.7% in the non-AZT based regimen, Odds ratio and 95% confidence interval of 0.9 (0.3-1.4).

The independent correlates of anemia were CD4<200 cells/µl, TLC<1900 cells/mm^3, MCV<80 fl and non use of HAART. There was a significant correlation between total FAHI scores and Hemoglobin with anemic patients scoring less as compared to the non anemic patients.

CONCLUSION

Anemia is prevalent in the HIV infected patients attending the KNH CCC both in the HAART naïve and HAART experienced groups but much more in the HAART naïve group. There was a trend towards increasing anemia in the AZT based regimen but because of small numbers the association was not established. Non use of HAART, CD4<200cells/µl, TLC<1900cells/mm^3 and MCV<80fl were shown to be independent correlates of anemia. Anemia was shown to have an impact on health related quality of life by use of Functional assessment of HIV infection Questionnaire.